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     (FILE 'HOME' ENTERED AT 11:34:24 ON 12 JUL 2002)

     INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
     BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO,
CABA,
     CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
     DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 11:34:32 ON
     12 JUL 2002
                SEA (CARBOXYL-PEG) OR (BIOTIN-PEG) OR (PEG-SILANES) OR
(HETEROF
               ---------
                2   FILE ANABSTR
                8   FILE BIOSIS
                3   FILE BIOTECHNO
                1   FILE CANCERLIT
               25   FILE CAPLUS
                3   FILE DDFU
                4   FILE DGENE
                3   FILE DRUGU
                3   FILE EMBASE
                3   FILE ESBIOBASE
                2   FILE IFIPAT
                1   FILE JICST-EPLUS
                7   FILE MEDLINE
               10   FILE SCISEARCH
                3   FILE TOXCENTER
               44   FILE USPATFULL
                6   FILE WPIDS
                6   FILE WPINDEX
L1              QUE (CARBOXYL-PEG) OR (BIOTIN-PEG) OR (PEG-SILANES) OR
(HETEROF
               ---------

     FILE 'USPATFULL, CAPLUS, SCISEARCH' ENTERED AT 11:37:35 ON 12 JUL 2002
L2           79 S L1
L3           71 DUP REM L2 (8 DUPLICATES REMOVED)
L4        78078 S L3 AND (FUSION PROTEIN) OR (HYBRID PROTEIN) OR (CHIMER?)
L5           14 S L3 AND (FUSION PROTEIN OR HYBRID PROTEIN OR CHIMER?)
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L3 ANSWER 68 OF 71 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:196581 CAPLUS
DOCUMENT NUMBER: 122:38832
TITLE: Pharmaceutical liposomes comprising PEG for administration of polypeptides
INVENTOR(S): Zalipsky, Samuel; Martin, Francis
PATENT ASSIGNEE(S): Liposome Technology, Inc., USA
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9421281	A1	19940929	WO 1994-US3102	19940322
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9463683	A1	19941011	AU 1994-63683	19940322

PRIORITY APPLN. INFO.: US 1993-35640 19930323
WO 1994-US3102 19940322

AB Pharmaceutical liposomes comprising PEG are prepd. for administration of polypeptides. Liposomes contg. **biotin-PEG** were incubated in the presence of avidin. Avidin-coated liposomes were incubated with biotinylated IgG to obtain liposome-bound antibody.

L3 ANSWER 59 OF 71 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:164107 CAPLUS
TITLE: Incorporation of PEG-proteins into polymers.
AUTHOR(S): LeJeune, K. E.; Panza, J.; Russell, A. J.
CORPORATE SOURCE: Dept. Chemical Engineering, Carnegie Mellon University, Pittsburgh, PA, 15219, USA
SOURCE: Book of Abstracts, 213th ACS National Meeting, San Francisco, April 13-17 (1997), POLY-182. American Chemical Society: Washington, D. C.
CODEN: 64AOAA
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English

AB While the attachment of proteins to polymers is straightforward, their incorporation during polymer synthesis holds several advantages. Unfortunately, the vast majority of polymns. occur in harsh org. solvents which have little to no ability to solublize protein. The attachment of polyethylene glycol to a protein mol. can greatly enhance org. solvent soly. and facilitates protein polymer synthesis. Since a PEG-protein can be dissolved in an org. solvent in close proximity to its native structure and contains functionalities capable of reacting with a growing polymer chain, the enzyme could become intrinsically coupled to a polymeric material during polymer synthesis. In order to react PEGylated proteins with monomers in org. soln. without significant deleterious effects, a **heterofunctional PEG** must be employed with one end of the PEG designed to couple to a protein and the other with a growing polymer chain. We have synthesized subtilisin polymers through using various **heterofunctional PEG** acrylates. Resultant PEG-subtilisin macromonomers and biopolymers have significant activity retention in both aq. and org. media. Significant enzyme stabilization upon PEG modification and immobilization have also been obsd.

L3 ANSWER 56 OF 71 USPATFULL

ACCESSION NUMBER:	97:89038 USPATFULL
TITLE:	Poly(ethylene glycol) and related polymers monosubstituted with propionic or butanoic acids and functional derivatives thereof for biotechnical applications
INVENTOR(S):	Harris, J. Milton, Huntsville, AL, United States Kozlowski, Antoni, Huntsville, AL, United States
PATENT ASSIGNEE(S):	Shearwater Polymers, Inc., Huntsville, AL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5672662		19970930
APPLICATION INFO.:	US 1995-642231		19951002 (8)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-499321, filed on 7 Jul 1995, now abandoned
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Krass, Frederick
LEGAL REPRESENTATIVE:	Bell, Seltzer, Park & Gibson, P.A.
NUMBER OF CLAIMS:	25
EXEMPLARY CLAIM:	1
LINE COUNT:	1103

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Active esters of PEG acids and related polymers are provided that have a single propionic or butanoic acid moiety and no other ester linkages. These polymer acids have a half life in water of from about 10 to 25 minutes. For example, alpha-methoxy, omega-propionic acid succinimidyl ester of PEG ("methoxy-PEG-SPA") has a nearly ideal reactivity with amino groups on proteins and other biologically active substances. The half life of methoxy-PEG-SPA is about 16.5 minutes in water. The invention also provides conjugates with proteins, enzymes, polypeptides, drugs, dyes, nucleosides, oligonucleotides, lipids, phospholipids, liposomes, and surfaces of solid materials that are compatible with

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(FILE 'HOME' ENTERED AT 11:04:21 ON 12 JUL 2002)

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 11:04:31 ON 12 JUL 2002

SEA (FUSION PROTEIN) OR (HYBRID PROTEIN) OR (CHIMER?)

1104	FILE ADISALERTS
212	FILE ADISINSIGHT
108	FILE ADISNEWS
3601	FILE AGRICOLA
116	FILE ANABSTR
543	FILE AQUASCI
1264	FILE BIOBUSINESS
591	FILE BIOCOMMERCE
49392	FILE BIOSIS
12935	FILE BIOTECHABS
12935	FILE BIOTECHDS
34353	FILE BIOTECHNO
4830	FILE CABA
23044	FILE CANCERLIT
54414	FILE CAPLUS
1847	FILE CEABA-VTB
53	FILE CEN
667	FILE CIN
914	FILE CONFSCI
10	FILE CROPB
183	FILE CROPU
56	FILE DDFB
2346	FILE DDFU
83326	FILE DGENE
56	FILE DRUGB
438	FILE DRUGNL
3087	FILE DRUGU
275	FILE DRUGUPDATES
521	FILE EMBAL
39825	FILE EMBASE
22984	FILE ESBIOBASE
3391	FILE FEDRIP
127	FILE FROSTI
580	FILE FSTA
19443	FILE GENBANK
19	FILE HEALSAFE
4509	FILE IFIPAT
3619	FILE JICST-EPLUS
11	FILE KOSMET
23090	FILE LIFESCI
13	FILE MEDICONF
72637	FILE MEDLINE
27	FILE NIOSHTIC
422	FILE NTIS
74	FILE OCEAN
6153	FILE PASCAL
111	FILE PHAR

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                5   FILE PHIC
              419   FILE PHIN
             3054   FILE PROMT
            41834   FILE SCISEARCH
                1   FILE SYNTHLINE
            28192   FILE TOXCENTER
            22753   FILE USPATFULL
              118   FILE USPAT2
             7478   FILE WPIDS
             7478   FILE WPINDEX
L1               QUE (FUSION PROTEIN) OR (HYBRID PROTEIN) OR (CHIMER?)
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     FILE 'BIOSIS, CAPLUS, MEDLINE, EMBASE, SCISEARCH, BIOTECHNO, TOXCENTER,
     LIFESCI' ENTERED AT 11:08:46 ON 12 JUL 2002
L2            633 S L1 AND LINK?(W)REGION
L3              8 S L2 AND (POLYETHYLENE(W)GLYCOL) OR PEG-NPC OR (X-PEG-Y)
L4              5 DUP REM L3 (3 DUPLICATES REMOVED)
L5             83 S L1 AND (LINK?(W)AGENT)
L6         138958 S L5 AND (PEG) OR (POLYETHYLENE GLYCOL)
L7              0 S L5 AND PEG
L8             42 DUP REM L5 (41 DUPLICATES REMOVED)
L9              0 S L5 AND (POLYETHYLENE(W)GLYCOL)
L10         16042 S (CROSS(W)LINKING(W)REAGENT)
L11         67326 S L10 AND (POLYETHYLENE(W)GLYCOL) OR (PEG)
L12           225 S L10 AND (POLYETHYLENE(W)GLYCOL)
L13            75 S L10 AND (PEG)
L14            58 DUP REM L13 (17 DUPLICATES REMOVED)

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L8 ANSWER 39 OF 42 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 13
ACCESSION NUMBER: 1989:587013 CAPLUS
DOCUMENT NUMBER: 111:187013
TITLE: **Chimeric** protein: abrin B chain-trypsin inhibitor conjugate as a new antitumor agent
AUTHOR(S): Lin, Jung Yaw; Hsieh, Yih Shou; Chu, Shu Chen
CORPORATE SOURCE: Coll. Med., Natl. Taiwan Univ., Taipei, 10018, Taiwan
SOURCE: Biochem. Int. (1989), 19(2), 313-23
CODEN: BIINDF; ISSN: 0158-5231
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Abrin B chain (ANB) and trypsin inhibitor isolated from Acacia confusa (ACTI) were covalently linked to form a **chimeric** protein (ANB-ACTI), using N-succinimidyl-3-(-2-pyridyldithio)propionate as **linking agent**. The **chimeric** protein had 31% of the trypsin-inhibitory activity of ACTI and 7% of the hemagglutinating activity of ANB but caused no inhibition of protein biosynthesis. ANB-ACTI had strong inhibitory effects on the growth of sarcoma 180 cells and Hela cells in culture, while the mixt. of an equiv. amt. of free ANB and ACTI did not. Thus, the ANB of the **chimeric** protein may act as a vector to carry ACTI into the tumor cells. The incorporation of ACTI into the **chimeric** protein potentiates its antitumor activity as